

## SERVICE AVIATION (CONTINUED)

**BARRAGE BUOYS:** Barrage balloons inside the big shed at Cardington, formerly the airship station and now the Balloon Training School. The formation of ten barrage units has been announced.

Sack-type containers are constructed to hold 44 and 176 lb. For the smaller model the canopy has an area of 130 sq. ft.; the hemp sack is cylindrical in form and its dimensions are 9 x 21 in. The 176-lb. model has 463 sq. ft. of supporting area and the dimensions of the container are 19 x 35 in.

Metallic containers are of welded-steel sheet with four rubber feet to absorb the landing shock. The area of the canopy used with them is 1,075 sq. ft., and several seconds are required for its complete unfolding. This means that the containers may not be dropped from below 500 ft.

### New Machines for Greece

**A**FTER extended tests with equipment from several countries, the Greek air force has taken into service a number of P.Z.L. P.24 single-seater gull-winged fighters powered with the Gnome-Rhône 14No engine and armed with two 20-mm. shell-guns and two rifle-calibre machine guns. Of the 36 examples ordered, several have already been delivered and have given a demonstration at the Tatoi aerodrome before His Majesty King George II of Greece, who has a very extensive aeronautical knowledge.

To complete the re-equipment of its air force Greece has also ordered from France twenty-four Potez twin-engined fighter-bombers (Gnome-Rhône 14 Mars small-diameter radials of 700 h.p.). For torpedo and bomb dropping the Dornier Do. 22 floatplane with Hispano-Suiza series Y engine has been adopted.

### Figures for the Do. 17

**A**LTHOUGH when *Flight* published its long illustrated description of the German Dornier Do. 17 on April 14 figures for weights and performance were not available, some data for the Gnome-Rhône-engined version as supplied to Yugoslavia have just become available.

The Yugoslav government has ordered thirty-six Do. 17s, more than fifteen of which have already been delivered by air from Friedrichshafen to Belgrade, the average speed for the trip usually being about 250 m.p.h., never falling below 230 m.p.h.

Eighty Gnome-Rhône 14No two-row radials of 1,000 h.p. each were ordered for installation in the new machines.

As powered with these engines the Do. 17 has the following characteristics: weight empty, 9,520 lb.; weight with equipment, 10,375 lb.; bomb load, 2,200 lb.; gross weight, 14,100 lb.; top speed at 11,150 ft., 260 m.p.h.; stall, 63.5 m.p.h.; ceiling, 32,500 ft.; range, 1,550 miles.

## FOREIGN SERVICE NEWS

### The Martin Modernised

**T**HE latest development of the Martin twin-engined monoplane bomber is the 166 with two Pratt and Whitney Twin Wasp radials rated at 1,020 h.p. This model has been released for export and has an estimated top speed of 255 m.p.h. at critical altitude. It resembles the machine entered by Martin for the last U.S. Army Air Corps bomber competition which was won by the Douglas B-18. At that time it was learned that the Martin was suffering from "filleting troubles."

### The Belgian Battles

**T**HE Fairey Battles now being delivered to Belgium differ in some details from the standard R.A.F. model. Although camouflaged, the machines are finished in lighter colours with a blue-grey for the under surfaces. A more glossy surface increases the speed, it is gathered, by something like 10 m.p.h. The radiator housing is longer, shallower and wider, and contains the carburettor air intake, which is of modified shape. Following R.A.F. practice the machines have no spinners, the gain in performance with such a refinement being negligible.

### Afghan Air Force

**D**URING the past few weeks many British and Italian aeroplanes have been delivered to the Afghan Air Force, which has been in a state of reorganisation for several years.

Enquiries made at the Afghan Consulate in Karachi revealed that 24 aeroplanes from Italy and 22 from Great Britain have been so far dispatched by road through Khyber Pass for Kabul.

A number of Afghan youths are being trained in England, Russia and Italy. Thirty of these pilots went to India some time back and after two months' practical course at the R.A.F. station at Drigh Road, left for Afghanistan. It is understood more pilots will be sent to India and other places for practical training.

Aerodromes have been planned at Hirat, Kandahar, Muzari Sharif and Jalalabad.

### Italian Supply Dropping

**T**HE first large-scale use of supply-dropping aircraft was made, it is claimed, by Italy during the Abyssinian campaign. Apart from wide-spread provisioning, deliveries were made to the most inaccessible localities of petrol, live animals, spare parts for engines, and radio equipment. In some instances not only were medical supplies and instruments dropped for an urgent operation, but the surgeon himself landed alongside by parachute. Some information on the supply-dropping apparatus employed has just been received from an Italian source.

Two main types of containers were developed: the sack type for solid or powdered commodities which would not suffer from the slight landing shock, and metallic ones for liquids and fragile objects.

Salvator parachutes with static lines 13 ft. long are normally employed by the Regia Aeronautica. To drop the container it is necessary to fix the fastener of the static line to a substantial part of the aircraft and to drop the container overboard, if possible with the parachute canopy uppermost. As soon as the static line is unwound a string cutter severs the cord fastening the two extremities of the container and the parachute is extracted.

**ITALIAN ECHELON:** Caproni A.P.1. two-seater fighter-attack machines of the Regia Aeronautica put up a very creditable piece of formation flying.

